

Thank you for your time reading this.

I am a Comcast customer, and have been for a long time.

Two years ago, I installed a BitTorrent client on one of my PCs, specifically to download an .iso of the Linux operating system. I only run BitTorrent when I want to download the latest version of Linux.

Linux is Free Software - which means that it can be installed and used by anyone for free. Because the software is free, the people who make it available bear the distribution cost.

They pay for their internet connection, just as I pay Comcast for my internet connection.

These downloads are a LOT of data. For the latest version of OpenSuse Linux, more than 100 Terabytes (40,000 installations) were downloaded. The OpenSuse people would have to pay ENORMOUS amounts of money if they couldn't share the .iso files out.

The solution is to share the .iso file out via BitTorrent.

This shifts a large portion of that data transfer from the OpenSuse people, to every internet service provider with paying customers. I paid Comcast to (essentially) subsidize the distribution of this file.

I pay a LOT of money for my Comcast internet service. For that, I should get internet service that isn't deliberately sabotaged by Comcast.

In late September 2007, the latest version of OpenSuse was released. I began the process of getting the OpenSuse 10.3 DVD .iso

After a few minutes, my BitTorrent client told me that the download would take two months. An hour later, the status screen said that the download would finish in twenty-one days.

I called Comcast technical support.

The Comcast technician ran a diagnostic test against my cable modem and told me that nothing was wrong - everything was fine.

I explained that the last time I downloaded an .iso it only took a couple hours. He said he didn't know what to tell me.

He suggested I examine my PC for some misconfiguration - shifting the blame to me.

Of course, later it comes to light that Comcast had implemented the Sandvine software to impersonate the 'other' end of the BitTorrent client, which allowed them to forge reset packets to break the current session.

I was looking at a twenty-one day download because Comcast was deliberately interfering with my expensive service.

I let BitTorrent run. About fourteen hours after the start, the download was done.

However, my 'sharing' ratio was zero. That is to say, although I received 4 GB of packets; I didn't send 4 GB of packets back out to keep the load off the OpenSuse people. Ideally, I would get to a share ratio of one to one.

I did finally figure out a way to share out the .iso; giving back to the community that made it available to me.

However, Comcast still hurt me, as I tried to do it.

I have a small Cisco router here at home that I bought to teach myself what I needed for Cisco certification.

The software that Comcast uses deliberately breaks established connections. My little Cisco router still tried to keep those connections open, in case the problem was just a glitch. The problem is that the router wasn't designed to handle thousands of 'glitches' per hour.

Every few hours (for six or seven days) my Cisco router would run out of

memory and lock up. I had to power off the router to get my internet connection back (every morning and evening).

Once I shared the .iso out (got my share ratio to one), I turned off the BitTorrent client. Magically, my Cisco router has been running perfectly since then.

My point is that Comcast may try to tell you that their Sandvine software doesn't actually hurt anything.

If they tell you that, they are lying to you.

Instead of allowing me to use my expensive internet connection to share the burden of distributing this file, Comcast shifted the burden to (all) other internet service providers who don't mess with their customer's connections.

Further, for me to download the .iso directly from an FTP server, the Comcast network would get hammered as a huge file clogs it's network (if only for a few minutes).

By using BitTorrent, the same file dribbles in over an hour or two (assuming no interference), allowing the Comcast network to smoothly handle it's traffic load.

To summarize: I occasionally use BitTorrent to relieve people who make Free Software onerous download costs. I pay for expensive service, and occasionally put that service to mild use above email and surfing the web. Comcast implemented software to deliberately sabotage my use of BitTorrent. When I called their technical support, they lied to me and tried to tell me that it was my equipment that was faulty.

That's what Comcast did to me. I use my service in a legal manner, but Comcast deliberately withheld service, and, lied to me about that.

I want the FCC to fine Comcast one month's fees per subscriber for interfering with BitTorrent traffic.

Beginning in March 2008, if Comcast is caught interfering with

BitTorrent traffic again, I want Comcast to be fined again.

For each subsequent violation (per month), I want the fine against Comcast to be doubled.

A simple fine, Comcast will pass along to subscribers. An exponential fine will prevent them from future infringement.

I know this was long. Thank you very much for your time and attention in this matter.